	Application No.	Applicant(s)
Notice of Allowability	10/091,288	NIKANDER, PEKKA
	Examiner	Art Unit	
	Prieto Beatriz	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/29/06*.

2. ☒ The allowed claim(s) is/are *1-11 AND 17-20*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

<u>*EXAMINER'S AMENDMENT*</u>

1.   An Examiner's Amendment to the record appears below. Should the changes or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Title

2.   Pursuant to M.P.E.P. §606.01, this title has respectfully been changed to read as follows:

    -- IP ADDRESS OWNERSHIP VERIFICATION MECHANISM --

Claims

3.   Authorization for this examiner's amendment was given by John Lastova (Reg. 33,149) on August 03, 2006.

4.   Any comments Applicants considers necessary must be submitted no later than the payment of the Issue Fee and to avoid processing delays, should preferable accompany the Issue Fees. Such submission should be clearly labeled " Comments on Statement of Reasons for Allowance". In event of any post-allowance papers (e.g. IDS, 312 amendment, petition, etc.), Applicant is exhorted to mail papers to the Production Control branch in Publications or faxed to post-allowance papers correspondence branch at (703) 308-5864 to expedite issuing process or call PUB's Customer Service if any questions at (703) 305-8497.

<u>SEE BELOW AMENDMENTS TO THE CLAIMS.</u>

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of operating an IP network comprising:

receiving one or more components from a host coupled to the IP network, the host having an IP address, the IP address comprising a routing prefix and an interface identifier part;

applying a one-way coding function to the or each component and/or derivatives of the or each component;

comparing a result or a derivative of the result against the interface identifier part of the IP address; and

asserting that the host is authorized to use the IP address which the host claims to own.

2. (Original) A method according to claim 1, wherein said components comprise a hash value being one of a sequence of related hash values.

3. (Original) A method according to claim 1, wherein said components comprise a public key or a digest of a public key generated by said host or obtained by said host from another authorized party or a fixed bit sequence of the same length.

4. (Original) A method according to claim 1, wherein said components comprise an initial interface identifier which corresponds to or is derived from a link layer address of the host, or a fixed bit sequence of the same length.

5. (Original) A method according to claim 1, wherein said components comprise an initial interface identifier which corresponds to or is derived from a link layer address of the host, or a zero bit sequence of the same length.

6. (Original) A method according to claim 2, wherein said components comprise a counter value which identifies the position of the received hash value in said sequence.

7. (Previously Presented) A method according to claim 2, wherein a series of hash values are derived at the host by applying a one-way coding function to a seed value and a public key or a digest of the public key.

8. (Original) A method according to claim 2, wherein said series of hash values are derived at the host by applying a one-way coding function to a seed and an initial interface identifier.

9. (Original) A method according to claim 2, wherein said series of hash values are derived at the host by applying a one-way coding function to a seed, a public key or a digest of the public key, and an initial interface identifier.

10. (Original) A method according to claim 2, and comprising deriving a hash value from the received hash value to provide a derivative to which the one-way coding function is applied, the derived hash value being the last hash value in the sequence.

11. (Original) A method according to claim 10, wherein in the event of a first IP address verification, the hash value received from the host is the hash value preceding the final hash value in the sequence and for each subsequent verification process, the next previous hash value must be received.

12-16. (Canceled)

17. (Previously Presented) A method of verifying that a host coupled to an IP network is authorised to use an IP address which the host claims to own, and that the host is able to receive data packets sent to that address, the method comprising: carrying out the method of claim 1 to confirm that said host is authorised to use the IP address; sending a challenge to the host using said IP address as the destination address for the challenge;

      receiving a response from the host; and

      verifying that the received response is a correct response to the challenge.

18. (Original) A method according to claim 17, wherein said challenge is a randomly generated number and the response comprises the challenge.

19. (Original) A method according to claim 17, wherein said challenge comprises said IP address concatenated with a randomly generated number, and the response comprises the IP address concatenated with the challenge.

20. (Original) A method according to claim 17, wherein said challenge is formed by applying a one-way coding function to said IP address concatenated with a randomly generated number, and the response is formed by applying a one-way coding function to the IP address concatenated with the challenge.

21-22. (Canceled)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see http://pair-direct.uspto.gov or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
          Commissioner of Patents and Trademarks
          P.O. Box 1450
          Alexandria, VA 22313-1450

Hand carried or delivered to:
          Customer Service Window located at the Randolph Bldg.
          401 Dulany St.
          Alexandria, VA 22314

Faxed to the Central Fax Office:
          (571) 273-8300 (New Central Fax No.)

     Or Telephone:

          (571) 272-2100 for TC 2100 Customer Service Office.

B. Prieto
Primary Examiner
TC 2100
August 3, 2006

BEATRIZ PRIETO
PRIMARY EXAMINER